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**One-Stop Multimedia Assistance**



## **Area Source Boiler Rule: Tune-Up Requirements**

January 8, 2014

# Area Source Boiler Rule

## Boiler MACT Tune-up Requirement

- 40 CFR Part 63 Subpart JJJJJJ – NESHAP for area sources

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# Existing or New?

- New source means that you commenced construction or reconstruction of the boiler or process heater after June 4, 2010 and you meet the applicability criteria at the time you commence construction.
- Existing source means you commenced construction or reconstruction of the boiler or process heater on or before June 4, 2010.

# Are You an Area Source?

- You must be an area source for *Hazardous Air Pollutants* (HAPs).
- Area source- any stationary source of HAPs that is not a major source.
  - Major source- emits 10 tons per year of any single HAP or 25 tpy of any combined HAPs.

Check your permit for your classification.

# Subject To Tune-Up Requirement

- Must have boiler tuned every 2 or 5 years
- No initial tune-up requirements for new boilers of any type
  - If under 2 yr requirement, tune-up must occur within 25 months of start up
  - If under 5 yr requirement, tune-up must occur within 61 months of start up

# Is a Tune-Up Required?

	Existing small coal units < 10MMBtu/hr	Existing Oil Units	Existing biomass units
2 Year	Yes; excluding limited use boilers and boilers with oxygen trim systems	Heat input capacity > 5MMBtu/hr excluding limited use boilers with oxygen trim systems	Excluding seasonal, limited use and boilers with oxygen trim systems
5 Year	X	X	X

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# Is a Tune-Up Required?

	Seasonal and limited use	Oil fired boilers	Boilers with oxygen trim systems
2 Year	X	X	X
5 Year	Yes	Heat input capacity ≤ 5 mmBtu/hr	That maintains an optimum air-to-fuel ratio that would otherwise be subject to 2 yr tune up

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# Do You Burn More Than 1 Fuel?

If so, the tune-up must be conducted burning the fuel that provided the majority of the heat input for 12 months prior to tune-up.

- Ex. Duel fuel boiler that burns primarily gas but burns oil more than 48 hrs/yr. It is subject to the rule, but must be tested using gas.

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# Initial Notification of Applicability

- **Submit no later than January 20, 2014**
- **This one is easy and it's hardcopy!**



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# Initial Notification Form

## Where do I send the hard copy form?

- Mail to:

1. Kentucky Division for Air Quality  
Program Planning Branch  
Attn: Jim Eubank  
200 Fair Oaks Lane, 1<sup>st</sup> Floor  
Frankfort, Kentucky 40601

or

- Jefferson County (only for Jefferson Co. facilities)  
Louisville Metro Air Pollution Control District
2. Director, Air, Pesticides and Toxics Management Division  
Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303–3104

# Why Perform a Tune-Up?

- The overall savings outweigh the initial costs
- Reduction in air emissions
- Increase in efficiency
- A tune-up extends the life of your boiler
- It's a requirement

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# Reason For Rule



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# Already Completed a Tune-Up?

- If you conduct the tune-up early the next tune-up is due no later than 25 months or 61 months as applicable.
- If the boiler is shutdown the tune-up must be conducted within 30 days of start up.

# Who Can Perform a Tune-Up?

- There is no certification requirement to conduct a boiler tune-up.
- You will likely need someone that has boiler experience.



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# Before You Begin

- Preparation
  - Identify intent
  - Assemble boiler information
  - Identify environmental regulations
  - Identify measurement location
  - Establish tune-up timeframe etc.
- Make as-found observations

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# Document Tune-Up

- As-found conditions
- Post tune-up conditions
- Modifications and repairs completed
- Recommended investigations and modifications
- Identified shortcomings of equipment

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# Tune-Up Step 1

- Inspect the burner / boiler and clean or replace components as necessary.



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# Tune-Up Step 2

- Inspect the flame pattern and adjust the burner to optimize the flame pattern.



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# Tune-Up Step 3

- Inspect the air-to-fuel ratio to ensure it is calibrated and functioning properly.



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# Tune-Up Step 4

- Optimize total emissions of carbon monoxide.



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# Tune-Up Step 5

- Measure the effluent stream of carbon monoxide and oxygen before and after adjustments.



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# Tune-Up Step 6

- Maintain a report containing information highlighted in 40 CFR 63.11224



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# Initial Tune-Up Compliance

- Existing, complete no later than March 21, 2014
- Deadline for submitting the notification of compliance status (NOCS) July 19, 2014 (This submittal will be electronic)
  - Compliance and Emissions Reporting Interface (CEDRI)
  - Central Data Exchange (CDX)

[www.epa.gov/cdx](http://www.epa.gov/cdx)

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# Initial Tune-Up Compliance

- Maintain records of dates and procedures of each boiler tune-up and the fuel used by the boiler.
- Required information highlighted in 40 CFR 63.11224
- Maintain records on-site for the first two years and keep record for at least five years.
- These records may be requested.

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# Subsequent Tune-Up Compliance

- Conduct the same performance tune-up as the initial tune-up in 40 CFR 63.11223(b).
- Complete the compliance certification for each tune-up. Currently, this does not have to be submitted but it can be requested.

# Helpful Resources

- For information on Area Source Boiler Compliance:  
<http://www.epa.gov/boilercompliance/>
- Boiler Tune Up Guide  
[http://www.epa.gov/ttn/atw/boiler/imptools/tune-up\\_guide.pdf](http://www.epa.gov/ttn/atw/boiler/imptools/tune-up_guide.pdf)
- Tune up Guide for Technicians – Area Sources:  
<http://www.epa.gov/airtoxics/boiler/boilerpg.html#DOC>

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# Questions?

## Contact Information:

Division of Compliance Assistance

800-926-8111

[www.dca.ky.gov](http://www.dca.ky.gov)

[envhelp@ky.gov](mailto:envhelp@ky.gov)

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